Docket No.: KCC-15,512

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# THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No:

09/859,665

Filing Date:

18 May 2001

Examiner:

Group No: 3761

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Title:

MENSES SPECIFIC

**ABSORBENT SYSTEMS** 

Customer No.:

35844

# APPEAL BRIEF UNDER 37 C.F.R § 41.37

## Mail Stop Appeal Brief - Patents

U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicants herewith file their Appeal Brief in the above-identified case, pursuant to their Notice of Appeal filed 23 June 2005.

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

23 August 2005

23 Aug 2005

Signature

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#### 1. REAL PARTY IN INTEREST

The real party in interest is Kimberly-Clark Worldwide, Inc., the assignee of the present application (as recorded at reel 012200 frame 0742).

## 2. RELATED APPEALS AND INTERFERENCES

The Applicants are not aware of any related appeals or interferences.

### 3. STATUS OF CLAIMS

Claims 1-4, 6, 8-20, 22-29, 31-34, 36-42, 44-48 and 50 are pending. Of these, Claims 27-29, 31, 46-48 and 50 have been allowed. Claims 13, 22, 42 and 45 were objected to as depending from a rejected base claim, and were indicated to recite allowable subject matter.

#### 4. STATUS OF AMENDMENTS

All amendments have been entered except for the Amendment After Final Rejection mailed 20 May 2005, which sought to amend independent Claim 15 to include the limitations of allowable Claim 22. This appeal is based on the claims filed with the Amendment mailed 21 December 2004, prior to the Amendment After Final Rejection, and the Amendment Under 37 C.F.R § 1.116 (affecting only Claim 32), mailed 19 July 2005.

# 5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a method for treating a viscoelastic proteinaceous fluid, a method for treating menses, an absorbent article and a personal care absorbent article.

Independent Claim 1, directed to the method for treating a viscoelastic proteinaceous fluid, recites the step of treating at least a portion of a personal care absorbent article with a treatment chemistry selected from the group consisting of water-soluble gelling agents which crosslink protein, thickening agents, plasma precipitators and combinations thereof. Claim 1 further recites contacting the (treated) portion of the personal care absorbent article with the viscoelastic fluid, thereby altering at least one property of the viscoelastic fluid and altering an interaction between the absorbent article and the viscoelastic fluid. The absorbent article includes a fluid pervious polyolefin cover

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sheet, a fluid impervious backsheet, and an absorbent core between them. As explained throughout the specification, the treatment chemistry can be used to modify the viscosity of a protein-containing fluid, such as menses, to facilitate its flow and absorption into an absorbent article while minimizing overflow and leakage.

Independent Claim 15, directed to the method for treating menses, requires the steps of forming a tampon including a nonwoven web material, dispersing at least one treatment chemistry on or within polyolefin or pulp fibers forming the nonwoven web material, and contacting the treatment chemistry with menses. Claim 15 recites that the treatment chemistry is selected from the group consisting of water-soluble gelling agents which crosslink protein, thickening agents, plasma precipitators and combinations thereof.

Independent Claim 27, directed to the absorbent article, has been allowed and requires no further discussion.

Independent Claim 32, directed to the personal care absorbent article, requires the article to include a polyolefin cover sheet, a backsheet, and an absorbent core between them. Claim 32 requires at least one of the cover sheet, backsheet and absorbent core to include a nonwoven material treated with a treatment chemistry selected from the group consisting of water-soluble polyglycan gelling agents which crosslink protein, thickening agents, plasma precipitators, and combinations thereof.

#### 6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-4, 6, 8-12, 14, 32-34, 36-41 and 44 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent 6,177,607 ("Blaney et al").

B. Claims 15-20 and 23-26 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,562,192 ("Hamilton et al").

### 7. ARGUMENT

## A. The Claim Rejections Based on Blaney et al Should Be Reversed

The Examiner rejected Claims 1-4, 6, 8-12, 14, 32-34, 36-41 and 44 under 35 U.S.C. § 102(e) as anticipated by Blaney et al. As to the independent Claims 1 and 32, the Examiner stated as follows:

Blaney discloses a method of treating a personal care absorbent article with a treatment chemistry, as disclosed in column 6, lines 29-43, and contacting the article with a

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viscoelastic fluid, as disclosed in column 1, lines 23-26. The treatment chemistry is a water-soluble gelling agent which crosslinks protein, chitosan, as disclosed in column 6, line 38. The article discloses a polyolefin cover sheet 21 as disclosed in column 5, lines 59-60, a backsheet 16, and an absorbent core 17, as shown in Fig. 2 (Final Office Action, 23 March 2005, p.2).

Contrary to the Examiner's assertion, Blaney et al does <u>not</u> disclose chitosan in a <u>water-soluble</u> form that would function as a water-soluble gelling agent that crosslinks protein. The form of chitosan disclosed in Blaney et al is already crosslinked and water-insoluble. The crosslinked, water-insoluble chitosan is used as a suberabsorbent material for absorbing an aqueous liquid, instead of a gelling agent which crosslinks protein. As explained in Blaney at al:

The term "superabsorbent" or "superabsorbent material" refers to a water-swellable, <u>water-insoluble</u> organic or inorganic material capable, under the most favorable conditions, of absorbing at least about 20 times its weight and, more desirably, at least about 30 times its weight in an aqueous solution containing 0.9 weight percent sodium chloride. (Col. 6 lines 12-17)

The superabsorbent materials can be natural, synthetic and modified natural polymers and materials. In addition, the superabsorbent materials can be inorganic materials, such as silica gels, or organic compounds such as cross-linked polymers. The term "cross-linked" refers to any means for rendering normally water-soluble materials substantially water-insoluble but swellable. (Col. 6 lines 22-24)

Examples of synthetic superabsorbent material polymers include the alkali metal and ammonium salts of acid) poly(methacrylic poly(acrylic and poly(acrylamides), poly(vinyl ethers), maleic anhydride copolymers with vinyl ethers and alpha-olefins, poly(vinyl alcohol), and mixtures and copolymers thereof. Further superabsorbent materials include natural and modified natural polymers, such as hydrolyzed acrylonitrilegrafted starch, acrylic acid grafted starch, methyl cellulose, carboxymethyl chitosan, cellulose, hydroxypropyl cellulose, and the natural gums, such as alginates, xanthan gum, locust bean gum and the like. (Col. 6 lines 29-40)

As stated in these passages, a superabsorbent material is, by definition, water-insoluble. A superabsorbent material can be formed by crosslinking a normally water-soluble material to render it insoluble. Chitosan is disclosed only as a superabsorbent (water-insoluble) material and not as a water-soluble gelling agent required by Applicants' Claims 1 and 32.

As explained in Applicants' specification, one advantage of water-soluble gelling agents is that they may easily be applied to a substrate in any desired pattern using an aqueous solution (p. 33 lines 17-20, p. 34 line 1 – p. 35 line 15). When the water-soluble gelling agents interact with a proteinaceous fluid, they interact with and crosslink the protein molecules to increase the viscosity of the fluid (p. 31 lines 8-16). In one embodiment, a superabsorbent polymer may be added along with the gelling agent to the absorbent article, to increase the absorbent properties (p. 36 lines 16-20). Yet the superabsorbent polymer is not a water-soluble gelling agent, and is not interchangeable with the water-soluble gelling agent recited in Applicants' claims.

Accordingly, independent Claims 1 and 32 are not anticipated by Blaney et al. Claims 2-4, 6, 8-12, 14, 32-34, 36-41 and 44 depend from Claim 1 or 32, and are not anticipated for at least the same reasons. The rejection of these claims under 35 U.S.C. § 102(e) should be <u>reversed</u>.

## B. The Claim Rejections Based on Hamilton et al Should Be Reversed

The Examiner rejected Claims 15-20 and 23-26 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent 6,562,192 to Hamilton et al. In an effort to simplify the prosecution, and possibly avoid an appeal, Applicants attempted to amend independent Claim 15 after final to include the limitations of Claim 22, which were found to recite allowable subject matter. The Examiner's refusal to enter the amendment was unreasonable, and contrary to the Examiner's representation that:

Claims 13, 22 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. (Final Office Action, 23 March 2005, p. 5)

Accordingly, this appeal addresses Claim 15 as it was previously presented, without the proposed limitations incorporated from Claim 22.

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As to the rejection of Claim 15, the Examiner stated:

With respect to Claim 15, Hamilton discloses a method comprising forming a tampon including a nonwoven web material and dispersing within the nonwoven web nits comprising a treatment chemistry, as disclosed at column 47, lines 33-40, and contacting the treatment chemistry with menses, as disclosed in column 7, lines 44-48. The treatment chemistry comprises chitosan, as disclosed in column 25, lines 25-42, which is a water-soluble gelling agent which crosslinks protein. (Final Office Action, 23 March 2005, p. 4)

Contrary to method Claim 15, Hamilton et al does not disclose the step of dispersing a treatment chemistry (e.g. a water-soluble gelling agent) on a surface of polyolefin or pulp fibers forming a nonwoven web material, or within the interstices of the nonwoven web material. Hamilton et al discloses fibrous nits in the form of free flowing particles (Abstract). In Examples 15 and 16 cited by the Examiner (Col. 47 lines 33-40), a tampon is filled in the center with the free-flowing particulate nits. In Example 15, a nonwoven coverstock is wrapped around the nits for containment. In Example 16, a layer of airlaid or fluff batt is wrapped around the nits and a coverstock material is attached to the airlaid or fluff batt.

The free-flowing particulate fibrous nits can comprise additives such as odor control agents, ion exchange resins, chitin or chitosan particles or additives, enzymes, surfactants or plasticizers. (Col. 25 lines 37-40). Add-on levels may range up to 50% by weight of the dry fibers in the fibrous particulate nits (Col. 25 lines 42-47).

However, the free-flowing nit particles of Hamilton et al do not constitute a "nonwoven web material" as recited in Claim 15, and defined in Applicants' specifications:

As used herein, the term "nonwoven web" or "nonwoven material" means a material having a structure of individual fibers or threads that are interlaid, but not in an identifiable manner, as in a knitted fabric. Nonwoven materials or webs have been formed from many processes such as, for example, spunbonding processes, meltblowing processes, and bonded carded web processes. The basis weight of nonwoven fabrics is usually expressed in grams per square meter (gsm) and the fiber diameters are usually expressed in microns (p. 17 line 19 - p. 18 line 3).

As used in Applicants' specification and claims, the term "nonwoven web material" refers to a fabric. As used in Hamilton et al, the term "fibrous nits" refers to free flowing particles. By incorporating a treatment chemistry into the particulate fibrous nits, Hamilton et al does not anticipate Applicants' claimed method step of "dispersing at least one treatment chemistry...on at least one of at least a portion of a surface of polyolefin or pulp fibers forming said nonwoven web material and within at least a portion of the interstices of said nonwoven web material..."

Furthermore, Hamilton et al does not anticipate the claimed method step of "contacting said at least one treatment chemistry with said menses." As noted by the Examiner, Hamilton et al discloses a sanitary napkin, which is intended to absorb and contain blood, menses and urine (Col. 7 lines 43-48). Even if Hamilton et al disclosed a sanitary napkin <u>capable</u> of performing the claimed method, the reference would not anticipate the method steps, and would not anticipate the step of contacting the treatment chemistry with the menses.

A rejection based on anticipation requires a clear showing that the prior art reference discloses <u>each and every limitation</u> of the rejected claims. <u>Schumer v. Laboratory Computer Systems</u>, 64 USPQ 2d 1832, 1842 (Fed. Cir. 2002). Put another way, a device or method which would literally infringe a claim if later in time, may anticipate the claim if earlier in time. <u>Polaroid Corp. v. Eastman Kodak Co.</u>, 229 USPQ 561, 574 (Fed. Cir. 1986), citing <u>Peters v. Active Mfg. Co.</u>, 129 U.S. 530, 537 (1889). A <u>method or process</u> claim is directly infringed <u>only when the method or process is performed</u>. The mere disclosure or sale of an article capable of use in performing a claimed method does not constitute direct infringement of a method claim. <u>Joy Technologies, Inc. v. Flakt, Inc.</u>, 28 USPQ 2d 1378, 1381-3 (Fed. Cir. 1993). By the same reasoning, the mere disclosure of a prior art article capable of performing a method (without disclosing the method steps) <u>does not anticipate the method claim</u>.

For these reasons, Hamilton et al does not anticipate Claim 15. Claims 16-20 and 23-26 depend from Claim 15, and are not anticipated for at least the same reasons. The rejection of these claims under 35 U.S.C. § 102(e) should be <u>reversed</u>.

## 8. CONCLUSION

For the above reasons, Applicants respectfully submit that the rejections of Claims 1-4, 6, 8-12, 14-20, 23-26, 32-34, 36-41 and 44 are improper as a matter of law and fact. Accordingly, Applicants respectfully request the Board to reverse the 35 U.S.C. § 102(e) rejections based on Blaney et al and Hamilton et al.

A check for the fee required by 37 CFR 41.37(a)(2) and 37 CFR 41.20(b)(2), updated pursuant to the Fiscal Year 2005 Fee Schedule, in the amount of \$500.00, is attached hereto. Please charge any additional amount owed, or credit any overpayment, to Deposit Account 19-3550.

Respectfully submitted,

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### APPENDIX A

1. A method for treating a viscoelastic proteinaceous fluid, whereby management of said viscoelastic fluid by a personal care absorbent article is improved, comprising the steps of:

treating at least one portion of said personal care absorbent article with at least one treatment chemistry selected from the group consisting of water-soluble gelling agents which crosslink protein, thickening agents, plasma precipitators and combinations thereof; and

contacting said at least one portion of said personal care absorbent article with said viscoelastic fluid, thereby one of altering at least one property of said viscoelastic fluid and altering an interaction between said absorbent article and said viscoelastic fluid;

wherein said personal care absorbent article includes a fluid pervious polyolefin cover sheet, a fluid impervious backsheet, and an absorbent core between them.

- 2. A method in accordance with Claim 1, wherein said viscoelastic fluid is menses.
- 3. A method in accordance with Claim 1, wherein said at least one treatment chemistry is in a form of solid particles.
- 4. A method in accordance with Claim 1, wherein said at least one treatment chemistry is uniformly dispersed on said portion of at least one of a surface and an interior of said absorbent article.
- 6. A method in accordance with Claim 1, wherein said at least one treatment chemistry is disposed along a peripheral region of said absorbent core.

8. A method in accordance with Claim 1, wherein said cover sheet, said backsheet and said absorbent core comprise at least one nonwoven web material.

- 9. A method in accordance with Claim 8, wherein said nonwoven web material comprises a plurality of polymeric fibers and said at least one treatment chemistry is disposed within said plurality of polymeric fibers.
- 10. A method in accordance with Claim 1, wherein said at least one treatment chemistry is dispersed within said at least one of said cover sheet, said backsheet and said absorbent core so as to form a gradient therein.
- 11. A method in accordance with Claim 1, wherein said at least one treatment chemistry comprises the water-soluble gelling agent and a superabsorbent is disposed in said absorbent core.
- 12. A method in accordance with Claim 1, wherein said absorbent article comprises a nonwoven web material selected from the group consisting of airlaid, coform, spunbond, meltblown, bonded carded web, non-bonded pulp, bonded pulp, fibrous webs and combinations thereof.
- 13. (Objected To) A method in accordance with Claim 9, wherein at least a portion of said polymeric fibers are bicomponent fibers and said at least one treatment chemistry is disposed within one segment of said bicomponent fibers.
- 14. A method in accordance with Claim 8, wherein said nonwoven web material is a laminate.

15. A method for treating menses comprising the steps of: forming a tampon including a nonwoven web material;

dispersing at least one treatment chemistry selected from the group consisting of water-soluble gelling agents which crosslink protein, thickening agents, plasma precipitators and combinations thereof on at least one of at least a portion of a surface of polyolefin or pulp fibers forming said nonwoven web material and within at least a portion of the interstices of said nonwoven web material;

contacting said at least one treatment chemistry with said menses.

- 16. A method in accordance with Claim 15, wherein said at least one treatment chemistry is in a form of solid particles.
- 17. A method in accordance with Claim 15, wherein said at least one treatment chemistry is uniformly dispersed on said portion of said at least one of said surface and said interior of said nonwoven web material.
- 18. A method in accordance with Claim 15, wherein said nonwoven web material comprises a plurality of nonwoven material layers.
- 19. A method in accordance with Claim 18, wherein said at least one treatment chemistry is dispersed on less than all of said plurality of nonwoven material layers.
- 20. A method in accordance with Claim 15, wherein said at least one treatment chemistry is dispersed non-homogeneously within said nonwoven web material.
- 22. (Objected To) A method in accordance with Claim 15, wherein said at least one treatment chemistry is disposed within an interior of at least a portion of said fibers.

23. A method in accordance with Claim 15, wherein said nonwoven web material is selected from the group consisting of spunbond, meltblown, bonded carded, airlaid, bonded pulp, unbonded pulp, coform and combinations thereof.

- 24. A method in accordance with Claim 15, wherein said treatment chemistry comprises the water-soluble gelling agent and a superabsorbent.
- 25. A method in accordance with Claim 15, wherein said treatment chemistry comprises the water-soluble gelling agent.
- 26. A method in accordance with Claim 25, wherein said water-soluble gelling agent comprises a polyglycan.
- 27. (Allowed) In an absorbent article comprising an absorbent layer having a first surface and a second surface, a fluid permeable cover disposed adjacent said first surface, a fluid impervious baffle disposed adjacent said second surface, the improvement comprising:

at least one treatment chemistry selected from the group consisting of watersoluble gelling agents which crosslink protein, thickening agents, agglutinizing agents, plasma precipitators, mucolytic agents, lysing agents and combinations thereof disposed at least one of on or within at least a portion of said absorbent layer;

and opposed side wings to which the treatment chemistry is applied.

- 28. (Allowed) An absorbent article in accordance with Claim 27 further comprising a superabsorbent disposed within said absorbent layer.
- 29. (Allowed) An absorbent article in accordance with Claim 28, wherein said treatment chemistry comprises the water-soluble gelling agent.

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31. (Allowed) An absorbent article in accordance with Claim 27 further comprising at least one material selected from the group consisting of airlaid, airformed, wetlaid, absorbent laminates, nonwovens and combinations thereof.

- 32. A personal care absorbent article comprising:
- a fluid pervious polyolefin cover sheet, a fluid impervious backsheet, and an absorbent core between them;
- at least one of the cover sheet, backsheet and absorbent core including a nonwoven material treated with a treatment chemistry selected from the group consisting of water-soluble polyglycan gelling agents which crosslink protein, thickening agents, plasma precipitators and combinations thereof.
- 33. An absorbent article in accordance with Claim 32, wherein at least one superabsorbent is disposed within said nonwoven material.
- 34. An absorbent article in accordance with Claim 32, wherein said treatment chemistry comprises the water-soluble gelling agent.
- 36. An absorbent article in accordance with Claim 32, wherein said treatment chemistry is disposed within a plurality of polymeric fibers comprising said nonwoven material.
- 37. An absorbent article in accordance with Claim 32, wherein said nonwoven material is selected from the group consisting of airlaid, spunbond, meltblown, bonded carded, non-bonded pulp, bonded pulp and combinations thereof.
- 38. An absorbent article in accordance with Claim 32, wherein said nonwoven material comprises a plurality of nonwoven layers.

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39. An absorbent article in accordance with Claim 38, wherein said at least one treatment chemistry is dispersed at least one of on and in less than all of said plurality of nonwoven layers.

- 40. An absorbent article in accordance with Claim 32, wherein said at least one treatment chemistry is dispersed non-homogeneously within said nonwoven material.
- 41. An absorbent article in accordance with Claim 32, wherein said at least one treatment chemistry is disposed on a surface of at least a portion of a plurality of polymeric fibers of said nonwoven material.
- 42. (Objected To) An absorbent article in accordance with Claim 32, wherein said nonwoven material comprises a plurality of bicomponent polymeric fibers and said at least one treatment chemistry is disposed in only one segment of said bicomponent polymeric fibers.
- 44. A method in accordance with Claim 6, wherein said at least one treatment chemistry is applied to at least one of opposed edges, opposed ends and a center region of said absorbent core.
- 45. (Objected To) A method in accordance with Claim 1, wherein said personal care absorbent article comprises at least two opposed side wings to which said at least one treatment chemistry is applied.
- 46. (Allowed) An absorbent article in accordance with Claim 27, wherein said at least one treatment chemistry is disposed on at least a portion of one of said fluid permeable cover and said fluid impervious baffle.

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47. (Allowed) An absorbent article in accordance with Claim 27, wherein said at least one treatment chemistry is disposed on at least one of a peripheral region and a center region of said absorbent layer.

- 48. (Allowed) An absorbent article in accordance with Claim 47, wherein said peripheral region comprises opposed edges and opposed ends of said absorbent layer.
- 50. (Allowed) An absorbent article in accordance with Claim 27, wherein said at least one treatment chemistry is one of said water-soluble gelling agent and said thickening agent.

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